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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,030	09/26/2005	Kenzo Miya	265347US2XPCT	8402
22850	7590	05/17/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			GARNER, ONDRIA L	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/523,030

Applicant(s)

MIYA ET AL.

Examiner

Ondria Garner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) ✓
Paper No(s)/Mail Date <u>2/2/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahata et al (5763971) in view of Watanabe et al (20030104246). Takahata discloses in figure 2 a superconductive magnetic bearing comprising a stationary bearing portion having an annular superconductor unit provided on a fixed portion 10, and a rotatable bearing portion having an annular permanent magnet unit provided on a rotary portion 2 so as to be opposed to the superconductor unit, the rotary portion 2

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being contactlessly supported relative to the fixed portion by the pinning effect of a superconductor constituting the superconductor unit, the superconductive magnetic bearing being characterized in that the permanent magnet unit comprises plurality of permanent magnet members 5a, 5b, 5c arranged in superposed layers

4. Takahata does not disclose an insulating layer. Watanabe discloses an insulating layer 3,5 provided between each adjacent pair of magnet members 2,4,6 in figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to have an insulation layer between the magnets in order to suppress eddy currents in the magnetic bearing.

5. Referring to claim 3, Takahata discloses in figure 1, a superconductive magnetic bearing, which is characterized in that the rotatable bearing portion comprises the annular permanent magnet 5a, 5b, 5c and an annular yoke 6 adjacent to the permanent magnet unit and opposed to the superconductor unit, the yoke comprising a plurality of yoke members 6 made of a magnetic material (col. 4, line 61) and arranged superposed layers.

6. Takahata does not disclose an insulating layer. Watanabe discloses an insulating layer 3,5 interposed between each adjacent pair yoke members 2,4,6 in figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to have an insulation layer between the yoke members in order to suppress eddy currents in the magnetic bearing.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahata and Watanabe as applied to claims 1 and 3 above, and further in view of Sung et al

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(6369476). Takahata and Watanabe teach all of the claimed features as discussed above. Takahata and Watanabe do not teach the superconductor comprising a plurality of superconductor bulks. Sung teaches in figure 7A, a superconductor unit comprising a plurality of circumferentially divided superconductor bulks 105. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the superconductor unit comprise a plurality of bulks in order to prevent the escape of the rotating members and thus offsetting the force such as the weight using magnetic pressure.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 6541885, 6762522, 20040021382, 6223512, 5525849, 6179773, 7002273, 6259179, 5438038, 5177387, 5159219, 20050116565 A1.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ondria Garner whose telephone number is 571-272-8327. The examiner can normally be reached on Monday through Friday, 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



OLG
5/12/2006



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